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(54) **REMOTELY-ACTIVATED
VERTEBROPLASTY INJECTION DEVICE**

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patent is extended or adjusted under 35
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This patent is subject to a terminal dis-
claimer.

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Mar. 31, 2003.

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A61B 17/58 (2006.01)

(52) **U.S. Cl.** **606/93; 606/92; 606/94**

(58) **Field of Classification Search** **606/92-95**
See application file for complete search history.

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(57) **ABSTRACT**

A remotely-activated injection device for use in vertebro-
plasty is provided to inject a fluorescent probe material into a
patient. The injection device includes a pump defining an
injection chamber having an exit opening; an actuator; and a
cable having a first end coupled to the actuator, and a second
end remotely engaging the pump. The actuator remotely con-
trols the pump by responsive movement of the cable to
thereby cause injection of a fluorescent probe material from
the injection chamber of the pump through the exit opening to
the patient.

30 Claims, 9 Drawing Sheets

